

In the Claims

1. (Currently amended) A system for tracking and managing mobile devices in a wireless network, comprising:

a plurality of device agents, each device agent being assigned to collect association information from a corresponding set of access points in the wireless network and operable to collect the association information from the corresponding set of access points by querying the access points in the corresponding set of access points; and

a device manager operable to receive the collected association information from the device agents, the device manager having a conflict resolution engine for resolving conflicting access point associations, the conflicting access point associations being two or more associations of ~~the same~~ one and only one mobile unit with respective two or more access points; and

the association information from an access point comprising information identifying mobile units which are associated with the access point.

2. (Previously presented) The system of claim 1, wherein:

the association information from the access point also comprises address information of the mobile units which are associated with the access point; and

the conflict resolution engine uses the address information to resolve conflicting access point associations to a mobile unit.

3. (Previously presented) The system of claim 1, wherein:

the association information from the access point comprises time stamps associated with the association information; and

the conflict resolution engine uses the time stamps to resolve conflicting access point associations to a mobile unit.

4. (Cancelled)

5. (Original) The system of claim 1, wherein the conflict resolution engine requests appropriate ones of the device agents to query access points corresponding to the conflicting associations.

6. (Original) The system of claim 1, wherein the conflict resolution engine uses network traffic statistics for a mobile device to resolve whether the device is associated with an access point.

7. (Original) The system of claim 1, wherein the conflict resolution engine is rule-based.

8. (Cancelled)

9. (Previously presented) The system of claim 1, wherein the device manager sends a request to a device agent to trigger the query process of the device agent.

10. (Previously presented) The system of claim 1, further comprising a topology service adapted to provide, through a graphical user interface, a visualization of current associations between the access points and the mobile units.

11. (Original) The system of claim 10, wherein the visualization is associated with a subnet.

12. (Previously presented) The system of claim 1, wherein the association information comprises identification of disassociated mobile units.

13. (Previously presented) The system of claim 1, wherein the association information comprises information describing disassociation of a mobile unit from an access point.

14. (Currently amended) A method for tracking and managing mobile devices in a wireless network, comprising:

collecting association information from a plurality of access points in the wireless network by querying the plurality of access points for the association information, the association information from an access point comprising information identifying mobile units which are associated with the access point; and

resolving conflicting access point associations through a conflict resolution engine, the conflicting access point associations being two or more associations of ~~the same one and~~ only one mobile unit with respective two or more access points.

15. (Original) The method of claim 14, further comprising using network traffic statistics for a mobile device to resolve whether the device is associated with an access point.

Claims 16-18 (Cancelled)

19. (Currently Amended) A method for tracking and managing mobile devices in a wireless network, comprising:

discovering wireless devices connected to the wireless network;

collecting association information from access points by querying the plurality of access points for the association information, the association information from an access point comprising information identifying a current association between the access point and an associated wireless device; and

providing a dynamic visualization of ~~current~~ associations between the access points and corresponding associated wireless devices.

20. (Original) The method of claim 19, further comprising tracking a mobile wireless device connected to the wireless network by using the collected association information.

21. (Original) The method of claim 19, further comprising:
generating mobility information by consolidating the collected association information and resolving any conflicts in the collected information; and
logging the resolved mobility information.

22. (Original) The method of claim 19, further comprising detecting unauthorized rogue devices connected to the wireless network.

23. (Original) The method of claim 19, further comprising detecting unauthorized access points.

24. (Original) The method of claim 19, further comprising detecting disassociated mobile units.

Claims 25-27 (Cancelled)

28. (Currently Amended) A system for tracking and managing mobile devices in a wireless network, comprising:

a plurality of device agents, each device agent being assigned to collect association information from a corresponding set of access points in the wireless network and operable to collect the association information from the corresponding set of access points by querying the access points in the corresponding set of access points;

a device manager adapted to receive the collected association information from the plurality of device agents, the association information from an access point comprising information identifying a current association between the access point and an associated wireless device; and

a topology service adapted to provide a ~~current~~ dynamic visualization of access points and corresponding associated wireless devices.

29. (Original) The system of claim 28, wherein the device manager assigns the access points to the plurality of device agents to balance a workload across the device agents.

30. (Original) The system of claim 28, wherein the device agent regularly polls the corresponding set of access points to determine changes to associations of the access points.

31. (Original) The system of claim 28, wherein the device agent queries the corresponding set of access points to request association information from the access points.

32. (Original) The system of claim 28, wherein the device manager consolidates the collected information and resolves any conflicts in the collected information.

33. (Original) The system of claim 28, wherein the association information from the access point is retrieved from an association table maintained by the access point.

34. (Currently amended) Software for tracking and managing mobile devices in a wireless network, the software being embodied in a computer-readable medium and when executed operable to:

collect association information from a plurality of access points in the wireless network by querying the plurality of access points for the association information, the association information from an access point comprising information identifying mobile units which are associated with the access point; and

resolve conflicting access point associations through a conflict resolution engine, the conflicting access point associations being two or more associations of ~~the same~~ one and only one mobile unit with respective two or more access points.

35. (Currently amended) A computer system for tracking and managing mobile devices in a wireless network, comprising:

a program storage device readable by the computer system, tangibly embodying a program of instructions; and

a processor operable to execute the program instructions to:

collect association information from a plurality of access points in the wireless network by querying the plurality of access points for the association information, the association information from an access point comprising information identifying mobile units which are associated with the access point; and

resolve conflicting access point associations through a conflict resolution engine, the conflicting access point associations being two or more associations of ~~the same~~ one and only one mobile unit with respective two or more access points.

36. (Currently Amended) Software for tracking and managing mobile devices in a wireless network, the software being embodied in a computer-readable medium and when executed operable to:

discover wireless devices connected to the wireless network;

collect association information from access points by querying the plurality of access points for the association information, the association information from an access point comprising information identifying a current association between the access point and an associated wireless device; and

provide a dynamic visualization of ~~current~~ associations between the access points and corresponding associated wireless devices.

37. (Currently Amended) A computer system for tracking and managing mobile devices in a wireless network, comprising:

a program storage device readable by the computer system, tangibly embodying a program of instructions; and

a processor operable to execute the program instructions to:

discover wireless devices connected to the wireless network;

collect association information from access points by querying the plurality of access points for the association information, the association information from an access point comprising information identifying a current association between the access point and an associated wireless device; and

provide a dynamic visualization of ~~current~~ associations between the access points and corresponding associated wireless devices.

38. (New) The system of claim 1, wherein the one and only one mobile unit is one and only one physical mobile unit.

39. (New) The method of claim 14, wherein the one and only one mobile unit is one and only one physical mobile unit.

40. (New) The software of claim 34, wherein the one and only one mobile unit is one and only one physical mobile unit.

41. (New) The computer system of claim 35, wherein the one and only one mobile unit is one and only one physical mobile unit.

42. (New) The method of claim 19, wherein the visualization further includes a projected future view of the associations between the access points and the corresponding associated wireless devices.

43. (New) The system of claim 28, wherein the visualization further includes a projected future view of the associations between the access points and the corresponding associated wireless devices.

44. (New) The software of claim 36, wherein the visualization further includes a projected future view of the associations between the access points and the corresponding associated wireless devices.

45. (New) The computer system of claim 37, wherein the visualization further includes a projected future view of the associations between the access points and the corresponding associated wireless devices.